



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW814GA BYPASS RATIO: 5.7
 UNIQUE ID NUMBER: 19PW127 PRESSURE RATIO (π_{co}): 33.9
 COMBUSTOR: TALON X
 ENGINE TYPE: TF RATED THRUST (F_{oo}) (kN): 68.6

REGULATORY DATA **** DATA SUPERSEDED **** SEE FOLLOWING UID FOR REVISED DATA: **01P22PW141**

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{oo} (g/kN) or SN	0.1	24.7	48.4	0.3
AS % OF ORIGINAL LIMIT	0.5	20.9	44.9	1.1
AS % OF CAEP/2 LIMIT (NO _x)			56.2	
AS % OF CAEP/4 LIMIT (NO _x)			61.7	
AS % OF CAEP/6 LIMIT (NO _x)			66.2	
AS % OF CAEP/8 LIMIT (NO _x)			73.5	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 x REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 - OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F _{oo})	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.667	0.00	0.00	23.26	0.3
CLIMB OUT	85	2.2	0.549	0.00	0.00	17.94	0.2
APPROACH	30	4.0	0.194	0.02	1.76	11.46	0.2
IDLE	7	26.0	0.070	0.05	13.88	6.25	0.2
LTO TOTAL FUEL (kg) or EMISSIONS (g)			256	6	1598	3168	-
NUMBER OF ENGINES				4	4	4	4
NUMBER OF TESTS				6	6	6	6
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)				0.1	23.1	46.1	0.3
SIGMA (D _p /F _{oo} in g/kN, or SN)				0.1	1.5	1.2	0.1
RANGE (D _p /F _{oo} in g/kN, or SN)				0-0.2	20.8-24.7	45-49.5	0-0.5

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.1-101.7
TEMPERATURE (K)	253-297
ABS HUMIDITY (kg/kg)	0.0005-0.0098

FUEL

SPEC	Jet A-1
H/C	0.16
AROM (%)	15.7-20.1

MANUFACTURER: Pratt & Whitney Canada
 TEST ORGANIZATION: PW800 Development Engineering, Production
 TEST LOCATION: Longueuil & Mirabel, Quebec, Canada
 TEST DATES: 23/06/2014-13/03/2015

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

REMARKS

- Data from Certification Report P&WC ER 7572 rev A
- Engines tested: 5738/01, GA0008/01, GA0009/01, GA0011/01
- Data extrapolation used for GA0008/01, GA0009/01, GA0011/01 due to cold ambient
- Future revision to remove extrapolated data and include additional engine data
- Export Classification: P-ECCN 9E991, ECL NLR
- Certification in accordance with Part III, Chapter 2, of Amendment 8 of ICAO Annex 16 Vol. II.
- NO_x levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)